AMENDMENTS TO THE CLAIMS

This listing of claims will replace all prior versions, and listings, of claims in the application.

Please add new claim 52, such that the status of the claims is as follows:

LISTING OF CLAIMS

1. (Previously presented) A light emitting diode (LED), comprising:

a semiconductor layer of a first polarity;

an active layer, located on the semiconductor layer of the first polarity;

a semiconductor layer of a second polarity, located on the active layer; and

a contact layer, located on the semiconductor layer of a second polarity,

wherein at least one side of a stacked structure at least composed of the active layer, the semiconductor layer of the second polarity and the contact layer has a wave-shape border in a top view of the LED, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED, wherein the wave-shape border is formed from an etched surface, and the etched surface is formed by employing one single mask.

2. (Original) The LED according to claim 1, wherein the semiconductor layer of the first polarity is made of GaN.

3. (Original) The LED according to claim 1, wherein the active layer is made of InGaN.

4. (Original) The LED according to claim 1, wherein the semiconductor layer of the second polarity is made of GaN.

5. (Previously Presented) The LED according to claim 1, wherein the wave-shape border in the top view of the LED is selected from a group consisting of triangular wave-shape border, semicircular wave-shape border, and parabolic wave-shape border.

6. (Original) The LED according to claim 1, wherein a deformed dimension of the at least one side is greater than an equivalent emitting wavelength of the LED.

7. (Original) The LED according to claim 1, wherein an incident angle of the light emitted from the active layer to the at least one side is less than a reflective critical angle of the at least one side.

8. (Original) The LED according to claim 1, wherein at least the active layer and the semiconductor layer of the second polarity therein further have at least one valley penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer; thereby increasing an efficiency of emitting the light emitted from the active layer to the outside of the LED.

9. (Original) The LED according to claim 8, further comprising a substrate located under the semiconductor layer of the first polarity, wherein the at least one valley further reaches to an upper surface of the substrate.

10-51. (Canceled).

52. (New) A light emitting diode (LED), comprising:
a semiconductor layer of a first polarity;

an active layer, located on the semiconductor layer of the first polarity; and

a semiconductor layer of a second polarity, located on the active layer,

wherein at least one side of a stacked structure at least composed of the active layer and the semiconductor layer of the second polarity has a wave-shape border in a top view of the LED, and the stacked structure further encloses at least one valley therein penetrating from an upper surface of the semiconductor layer of the second polarity to a lower surface of the active layer, thereby reducing the probability of reflecting the light emitted from the active layer, thus making light emitted from the active layer penetrate through the at least one side and be emitted outside the LED.